

Remarks

[1] Applicant's representative thanks the Examiner for explaining that the facsimile transmission of the Response to the Non Final Action dated 1 December 2008 was incomplete.

[2] Please find attached here following the entire Response to Non Final Action dated 1 December 2008, which was originally submitted.

[3] In view of the foregoing, applicant respectfully requests the allowance of this application.

Respectfully submitted,

/Loretta F. Smith/

LORETTA F. SMITH
ATTORNEY FOR APPLICANT
Registration No.: 45,116
Telephone: 302-992-2151
Facsimile: 302-992-5374

Date: 10 Jul 09

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
IN THE APPLICATION OF:

PASCAL SCARAMUZZINO

CASE NO.: AD6920USNA

SERIAL NO.: 10/816421

GROUP ART UNIT: 1711

FILED: APRIL 1, 2004

EXAMINER: HAIDER, SAIRA BANO

FOR: MODIFIED POLYACETALS FOR DECORATIVE APPLICATIONS

RESPONSE TO NON-FINAL OFFICE ACTION OF DECEMBER 1, 2008

This is Applicant's response to the Non-Final Office Action of December 1, 2008, for which a three (3) month shortened statutory period for response was set.

Under 37 C.F.R. § 1.136(a), this response also includes a petition for a one month extension of time to respond the Office Action.

Applicants respectfully request reconsideration and submit the following in support thereof.

Claim list begin on page 2 of this paper.

Responsive statements begin on page 5 of this paper.

CLAIMS

10. (Previously presented) A process of producing a painted polyacetal article, comprising:

- providing a polyacetal substrate produced by solidifying a molten blend comprising 90 – 99.5wt% polyacetal and 0.5 – 10wt% of semicrystalline or amorphous thermoplastic non-polyacetal resin;

wherein said semicrystalline or amorphous thermoplastic non-polyacetal resin comprises:

a blend of first and second polyamides, each having melt viscosity at 200°C of less than 50,000 poise measured at a shear stress of 105 dynes/cm²; and

each has a melting point of less than about 180°C

and wherein the second polyamide is present in an amount equal to or less than the first polyamide in the range 0.1 - 2.5wt%;

- treating a surface of the polyacetal substrate for the application to the treated surface of a paint, to enhance exposure of said semicrystalline or amorphous thermoplastic non-polyacetal resin to an applied paint; and
- applying a thermoplastic or partly thermoplastic paint from a solvent-borne, water-borne or powder 1K paint system onto the treated surface of the polyacetal substrate.

11. (Original) The process of claim 10, wherein the surface of the polyacetal substrate is treated by a surface modification technique selected from etching, flaming, ionization, sanding, surface cleaning and UV exposure.

12. (Original) The process of claim 11, wherein the surface of the polyacetal substrate is treated by etching from a mixed acid bath containing at least three acids from the group sulfuric acid, phosphoric acid, hydrochloric acid and an organic acid.

13. (Original) The process of claim 12, wherein the mixed acid bath contains sulfuric acid, phosphoric acid, hydrochloric acid and acetic acid.

14. (Original) The process of claim 10, wherein the polyacetal substrate is provided by molding, extrusion or thermoforming.
15. (Original) The process of claim 10, wherein the thermoplastic or partly thermoplastic paint is applied by dipping, spraying, brushing or powder application.
16. (Original) The process of claim 10, which comprises covering the applied thermoplastic or partly thermoplastic paint with a layer of thermosetting paint or varnish.

REMARKS

Status of claims

Claims 10-16 are pending in the present application.

Claims 1-9 have been withdrawn.

Claim 17 has been canceled.

Response to Rejections

The Examiner has rejected claims 10-16 under 35 U.S.C. 103(a) as being unpatentable over Suzuki (GB 2,091,274) in view of Flexman (US 5,318,813) for reasons stated in the office action of December 1, 2008. Applicant requests reconsideration of the rejection.

The Examiner suggests it would have been obvious to substitute the polyacetal polyamide blend of Flexman for the polyacetal resin of Suzuki in order to use a resin with improved stiffness, elongation and toughness (properties present in the Flexman composition) to arrive at the process of applicant's invention.

Applicants respectfully traverse the rejection for the following reasons.

Applicants invention is a process for coating polyacetal articles using a specific polyacetal substrate comprising 90 – 99.5wt% polyacetal and 0.5 – 10wt% of semicrystalline or amorphous thermoplastic non-polyacetal resin; wherein said semicrystalline or amorphous thermoplastic non-polyacetal resin comprises a blend of first and second polyamides, each having melt viscosity at 200°C of less than 50,000 poise measured at a shear stress of 105 dynes/cm²; and each has a melting point of less than about 180°C and wherein the second polyamide is present in an amount equal to or less than the first polyamide in the range 0.1 - 2.5wt%. The specific polyacetal substrate gives surprising and unexpected coating and adhesion properties when surface treated and coated with a 1K paint system. As will be discussed in detail below, the cited references or various combinations of references do not motivate or suggest one of ordinary skill to the specific invention.

The “obviousness” rationale requires choosing from a finite number of predictable solutions and a reasonable expectation of success, as indicated in MPEP 2143.02.

Applicants believe the above disclosures are non-specific in nature. They do not offer a finite number of predictable solutions. Although Flexman discloses a polyacetal

composition having a component (c) 1-59 wt % of at least one amorphous thermoplastic, the reference does not specifically disclose the “blend of first and second polyamides”; required of claim 1. Furthermore, the Flexman reference discloses that the amorphous thermoplastic can be selected from a large group of polymers defined in column 10, line 56, through column 11, line 22, of the reference. Although polyamides are specifically mentioned as a preferred class; there are also mentioned at least five other preferred classes. Furthermore there is no teaching of improved adhesion or improved surface coatings being derived from the compositions. Thus, one would have no reason to combine Flexman with Suzuki, except with hindsight knowledge of Applicants invention, and the desire to find all of the elements of Applicants’ invention, with knowledge of those elements, in the art. Thus, applicants believe that there is not adequate support to establish a prima facie case of obviousness. Thus, it is believed the rejection has been traversed.

For the reasons stated above, it is believed that claims 10 – 16 are nonobvious and patentable over Suzuki in combination with Flexman. As such, we request allowance of the claims as amended herein.

SUMMARY

In view of the foregoing amendments and remarks, Applicants submit that this application is in condition for allowance. In order to expedite disposition of this case, the Examiner is invited to contact Applicants’ representative at the telephone number below to resolve any remaining issues. If there are any fees due which have not been accounted for, please charge them to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

Respectfully submitted,

/Paul J. Shannon/

Paul J. Shannon

AGENT FOR APPLICANT

Registration No.: 40,168

Telephone: (302) 695-1267

Facsimile: (302) 992-3257